

Algorithms Day 2



# Lab Activity:

## Critical Section & Big-Oh Notation

## *Critical Section and Complexity Class*

- Download the files **Employee.java** and **EmployeeCatalog.java** from Collab.
- The Employee class is just a holder of information for each employee. Look through it and make sure that you understand all of the fields associated with this class.
- The **EmployeeCatalog** class has 4 methods, **sortByValue()**, **averageLinesOfCode()**, **setQualityGrade()**, and **setQualityRankings()**. Review each of these methods and determine:  
(1) the critical section, and (2) the complexity class of each method.
- Submit using the in-line text-box on Collab. List the method name followed by the line(s) for the critical section and the complexity class. For example:  
**sortByValue() critical section lines X-Y, complexity class O( Z ).**